

IN THE CLAIMS:

Please cancel Claims 1-18, which are withdrawn from consideration, without prejudice.

Please cancel Claims 30-47, which are withdrawn from consideration, without prejudice.

Please amend the claims as follows:

19. A method of estimating the susceptibility of an individual to have offspring that develop a developmental disorder comprising:

(a) collecting a biological sample from one or more participants; wherein a participant is either the individual or a blood relative of the individual; and wherein the biological sample contains nucleic acids and/or proteins of the participant;

(b) analyzing the nucleic acids and/or proteins from the biological sample; wherein said analyzing results in a partial or full genotype for the alleles of two or more the genes involved in folate, pyridoxine, and/or cobalamin metabolism; and wherein said partial or full genotype forms a dataset of genetic explanatory variables for the participants;

(c) adding the datasets of genetic explanatory variables obtained from steps (a) and (b) to a genetic reference dataset therein forming a combined genetic dataset;

(d) formulating a model comprising the genetic explanatory variables obtained from the participants; and

(e) analyzing the combined genetic dataset by binary logistic regression;

wherein a predicted probability for the individual to have offspring that develop a developmental disorder is determined; and wherein the genetic and environmental susceptibility of an individual to have offspring that develop a developmental disorder is estimated, and wherein the individual is a pregnant woman.

29. A method of treating an asymptomatic individual determined by the method of Claim 21 to be susceptible to have offspring that develop ~~for developing~~ a developmental disorder comprising administering methylfolate, cobalamin or pyridoxine.